

Naval War College (NWC)
Newport, RI

The Air Expeditionary Force: What You Need, When You Need It

By

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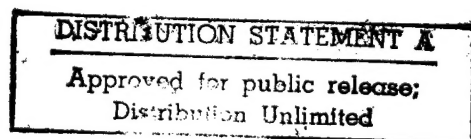
A paper submitted to the Faculty of the Naval War college in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College of the Department of the Navy.

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13 June 1997

Paper directed by Captain Jackson
Chairman, Joint Military Operations (JMO) Department



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NWC/JMO

19970815 055

DTIC QUALITY INSPECTED 1

REPORT DOCUMENTATION PAGE

1. Report Security Classification: UNCLASSIFIED			
2. Security Classification Authority:			
3. Declassification/Downgrading Schedule:			
4. Distribution/Availability of Report: DISTRIBUTION STATEMENT A: APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED.			
5. Name of Performing Organization: JOINT MILITARY OPERATIONS DEPARTMENT			
6. Office Symbol: C		7. Address: NAVAL WAR COLLEGE 686 CUSHING ROAD NEWPORT, RI 02841-1207	
8. Title (Include Security Classification): Air Expeditionary Force: What you need; when you need it (U)			
9. Personal Authors: Sheryl G. Atkins, Lt Col USAF			
10. Type of Report: FINAL		11. Date of Report: 19 May 1997	
12. Page Count: 20			
13. Supplementary Notation: A paper submitted to the Faculty of the NWC in partial satisfaction of the requirements of the JMO Department. The contents of this paper reflect my own personal views and are not necessarily endorsed by the NWC or the Department of the Navy.			
14. Ten key words that relate to your paper: airpower air force expeditionary CENTCOM wing presence projection joint vision			
15. Abstract: The Air Force's new Air Expeditionary Force (AEF) provides rapid, responsive, and reliable airpower to the CINCs. Directly aligned with the National Security Strategy, the AEF is a valuable operational art tool. Overall, benefits of the concept far outweigh any costs associated with establishing an AEF. What exactly is this new AEF? How does it support warfighting strategies of today and the future? How does the AEF add to operational campaign planning and operations? Joint Vision 2010 provides a conceptual framework for commanders and planners. The AEF provides one capability to implement the operational concepts of this plan. What's more, commanders can use the AEF to manage space, time, and forces. In addition, by virtue of its pre-hostilities' agreements and peacetime operations, the AEF helps commanders with some of the challenges in leading combined fighting teams so common in today's coalition warfare environment. The AEF is an evolving concept. Capabilities are increasing. Challenges are being addressed and resolved. Together with other forces, the AEF provides capabilities across the entire spectrum of military operations. AEFs can participate in peacetime engagement, deterrence, and conflict prevention, and can fight and win--aspects of Joint Vision 2010 full spectrum dominance.			
	Unclassified X	Same As Rpt	DTIC Users
17. Abstract Security Classification: UNCLASSIFIED			
18. Name of Responsible Individual: CHAIRMAN, JOINT MILITARY OPERATIONS DEPARTMENT			
19. Telephone: 841-6461		20. Office Symbol: C	

Abstract

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The Air Expeditionary Force: What You Need, When You Need It

The Chairman of the Joint Chiefs of Staff tells us, “The dynamic and unpredictable post-Cold War environment demands that we maintain military capabilities flexible and responsive enough to cope with unforeseen threats.” The Air Force’s new Air Expeditionary Force (AEF) answers this call. Directly aligned with the National Security Strategy of Engagement and Enlargement, the AEF is a valuable operational art tool for the commander and planners. Overall, benefits of the concept far outweigh any costs associated with establishing an AEF.

What exactly is this new AEF? How does it support warfighting strategies of today and in the future? How does the AEF add to operational campaign planning and operations? Joint Vision 2010 provides a conceptual framework for commanders and planners. The AEF is a flexible, responsive, and reliable airpower package which provides one capability to implement the operational concepts of this plan. What’s more, commanders can use the AEF to manage space, time, and forces. In addition, by virtue of its pre-hostilities’ agreements and peacetime operations, the AEF helps commanders with some of the challenges in leading combined fighting teams so common in today’s coalition warfare environment. The AEF is an evolving concept. Capabilities are increasing. Challenges are being addressed and resolved. Together with other forces, the AEF provides capabilities across the entire range of military operations. AEFs can participate in peacetime engagement, deterrence and conflict prevention, and can fight and win—the aspects of full spectrum dominance described in Joint Vision 2010.

Introduction

“The dynamic and unpredictable post-Cold War environment demands that we maintain military capabilities flexible and responsive enough to cope with unforeseen threats.”¹

Chairman of the Joint Chiefs of Staff, 1995

The Clinton Administration current National Security Strategy (NSS) states, “We are committed to enhancing U.S. national security in the most efficient and effective ways possible.”² The development of the new Air Expeditionary Force (AEF) supports this intention as well as the specifics of the engagement and enlargement guidance. Among the Administration’s central goals is the objective “to enhance our security with military forces that are ready to fight and with effective representation abroad.”³ To this end, the U.S. will maintain a strong defense capability and must deploy flexible military forces.⁴ An AEF is ready to fight, represents the U.S. effectively, and has flexibility.

Because it supports current and future warfighting concepts, the AEF is a valuable tool for the operational commander. Benefits of this new and evolving idea far outweigh any costs associated with establishing an AEF. To address this subject, it is first necessary to understand the basic philosophy and notional design of an AEF. With that understood, the tie to national security guidance and use in support of current and future operational concepts can be explored. While there are some challenges for the AEF, they can be addressed.

Background and Basics

It appears the catalyst for the first use of the AEF was a gap in carrier presence in the Gulf of Arabia.⁵ Because of naval force reductions, continuous coverage is no longer possible. As scheduled, the USS *Independence* had to leave the area in October 1995. A replacement battle group was not due to arrive until three months later. This led Central Command to request a different force presence option, the AEF. The concept has continued evolving from that point. Today, the stated mission of the Air Expeditionary Force is “to give regional commanders in chief (CINC) rapid, responsive, and reliable airpower capabilities and options that meet specific theater needs.”⁶ A fully implemented AEF would have set deployment procedures allowing it to be in theater and flying combat sorties just 48 hours after the execute order was issued. Its capabilities span the spectrum of operations from humanitarian relief to actual combat.⁷ It is designed as a rapid deployment, specifically-tasked force option.⁸ Light on logistics, the AEF goes in and out quickly.

A notional AEF airpower package consists of 30 aircraft-12 air superiority, 12 strike, and 6 suppression of enemy air defenses (SEAD) fighters.⁹ However, the composition would be tailored to meet exact theater or situation requirements. If necessary, four tankers would also be included. The AEF is postured for short-notice crisis response and can generate between 70 and 80 sorties per day.¹⁰ What’s more, CONUS-based bombers may also be tasked providing additional airpower capability to be integrated with the AEF operations.

Personnel assigned to an AEF number approximately 1,000 members, with an additional 175 people if tankers also deploy.¹¹ These personnel serve in their CONUS

home wings, but are tasked permanently to be part of the AEF. As such, they are on “mobility status” or “alert” and have been trained and prepared accordingly. They deploy to and operate with the AEF out of a pre-determined overseas location. The AEF works with the host nation forces and the support structure there as pre-arranged.

Currently the Air Force has not tested the “blind go” 48-hour capability described earlier.¹² However, there have been three successful AEF deployments--first to Bahrain and then Jordan and Qatar.¹³ A fourth deployment is in progress at this time. Each case has presented the opportunity to establish support systems and infrastructure and to conduct training with coalition forces. While definitely serving as learning experiences, it is important to distinguish the fact each deployment was based on a real-world CINC operational requirement.¹⁴ While these forces have had longer build up periods than advertised as part of the AEF capability, it should be noted that aircraft did arrive and fly sorties within the prescribed time goals. For example, aircraft arrived in Qatar on 3 July 1995 and sorties were launched that same day.¹⁵ The CINC determined the mission and duration of these deployments.¹⁶ The original intent of the AEF was for a short duration stay, or at least to deploy initially with minimal logistics support--a 7-30 day capability.¹⁷ Mission specifics may drive other long term requirements, but should not affect the initial deployment response time.

Right Tool at the Right Time

The AEF and its capabilities visibly support NSS goals and objectives from the top down. The Clinton Administration’s guidance on engagement describes an environment highlighting the need for this type of organization--capable, flexible, responsive, and cost-effective. Specifically, the Administration’s NSS tasks the military to credibly deter and

defeat aggression by projecting and sustaining U.S. power in more than one region if necessary and to do it “preferably in concert with our allies and friends...”¹⁸ The AEF fits this bill as well as the guidance to “deploy quickly and supplement U.S. forward-based and forward-deployed forces...”¹⁹ Today’s security environment is less clear, so the military must maintain the flexibility to meet unknown future threats. The NSS points out, “Integral to these efforts is...new and more efficient combat organizations.”²⁰ The AEF is such an organization.

In addition, the NSS tasks forces to be forward deployed or stationed in key overseas regions in peacetime to provide presence. The Administration recognizes robust overseas presence can take several forms.²¹ An AEF is one alternative. By deploying and operating at forward locations overseas even during peacetime, the AEF shows our commitment to U.S. and allied interests as well as a capability for rapid crisis response without a costly permanent base. This is an important aspect of the current U.S. military capability because the U.S. has drawn back into a more CONUS-based force, and we need the ability to project and/or augment power into overseas regions.

In our National Military Strategy (NMS), the Chairman of the Joint Chiefs of Staff describes the concepts of overseas presence and power projection as fundamental towards accomplishing our specific tasks to promote stability and thwart aggression.²² Like the NSS, the NMS also describes overseas presence maintained by forces temporarily deployed and pre-positioning equipment--essentially the role of an AEF. In addition, this guidance specifically calls for an increase in our ability to project forces abroad. Power projection capability is considered a key force employment principle. It brings the added benefit of flexibility. The AEF represents such an increase. CINCs or joint task force

(JTF) commanders charged with deterrence and stability maintenance missions will look for presence and power projection and find the AEF a viable option among their force choices.

Predictably, power projection enabled by overseas presence is also a fundamental strategic concept of the future force described in Joint Vision 2010.²³ Avenues to implement the vision are listed as new operational procedures and organizations as well as innovative thinking. “All organizations must become more responsive to contingencies, with less startup time between deployment and employment.”²⁴ The AEF is one of these “agile organizations.”

Operational Concepts and the AEF

Joint Vision 2010 provides a conceptual framework for the CINCs and planners. The AEF aligns with that part of the template governing operational concepts for commanders’ use in optimizing force effectiveness. Specifically, there are four of these emerging concepts--**precision engagement, full-dimensional protection, dominant maneuver, and focused logistics.**

The joint vision describes the operational concept of precision engagement as a system of systems allowing for targeting, command and control (C2), engagement, assessment, and reengagement when required. Airpower in general (and so obviously the AEF) contributes to precision engagement, because of its use of technology in precision guided munitions and C2 as well as its range and flexibility. Another concept, full-dimensional protection, calls for multi-layered defenses. Because air force achieve control of the air as they accomplish their primary mission, airpower inherently contributes to

full-dimensional protection. As one of the methods to employ airpower, the AEF provides operational commanders the ability to implement both of these parts of the vision.

The AEF even more directly supports the operational concepts of dominant maneuver and focused logistics. Dominant maneuver (positioning and employing forces to accomplish objectives) points to asymmetric leverage achieved by positional advantages and speed and tempo. The AEF base located in theater brings that advantage, and the deployment concept coupled with airpower characteristics produces decisive speed and supports increased tempo. The AEF is tailored-to-task, has a reduced buildup time, and allows agile, faster moving joint operations--all characteristics supporting dominant maneuver. Lastly, the joint vision addresses focused logistics, a concept referring to tailored logistics packages. It emphasizes pre-positioning and lighter deployment loads--attributes built into AEFs. Using this airpower force option, a commander can effectively outpace and outmaneuver the enemy as envisioned by senior leadership in their guidance.

To enhance implementation of these Joint Vision 2010 operational concepts, commanders should balance **the factors of space, time, and forces**.²⁵ Space refers to characteristics ranging from shape and geographical elements of the theater to geostrategic positions and distances involved. Time encompasses planning time, deployment time, duration of the war, etc. The factor of forces concerns not only the size, type, and mix of "troops," but other aspects such as readiness, training, and employment concepts. The AEF is one of the instruments that allows commanders to manage these three related factors.

Through the use of an AEF, the CINC has an additional option to gain positional advantage; i.e., manage the factor of **space**; in support of dominant maneuver. With this

package, the commander has stationed and employed forces in such a way that space has been manipulated to enhance this operational concept. First, the peacetime negotiations have added space by obtaining more airfields. This can compensate for constraints on space in a theater. Smaller employment areas limit the movement and size of forces. There may not be room for reinforcements for extra protection or strength in depth. In this case, commanders can use the AEF for increased maneuverability and operational fires. In addition, battlespace is manipulated because establishment of AEF bases also changes lines of operations and communications. AEFs cut the distance between home bases and the theater as the forward location becomes its home base. This adds decisive speed and tempo to the equation as is required to support dominant maneuver.

Commanders must also address space in terms of geostrategic position of the theater (country) of operations. If the theater occupies a central position between adversaries, commanders have the difficult task of dealing with potential 2-front operations once hostilities start.²⁶ An AEF stationed just outside the theater can be tailored to provide a capability to manage this situation. It may serve to deter aggression from a second adversary, provide defense if that fails, or initiate offensive actions if the particulars of the potential second front warrant. Whatever the case, the AEF is another force option providing the needed numerical strength and mobility for these operations, therefore decreasing the position or “space” disadvantage. Operating from this exterior position, this AEF can strike a wide range of objectives along the enemy periphery. It has implemented dominant maneuver and puts the enemy in a less advantageous position. As an airpower package, it overcomes physical characteristics of terrain that may challenge

other force options. This increases commanders' alternatives as the physical environment of the space becomes less of a factor.

Proper consideration of space will often enhance the commander's ability to manage **time**. The AEF's distance reduction from home base to the theater illustrates this. Time is reduced because the distance or space involved is smaller. The commander can then utilize the AEF's tempo and decisive speed to achieve the results of dominant maneuver. In line with this, the shortened buildup period and quick deployment capability of an AEF support the warfighting tenets of agility and initiative.²⁷ The reaction period is reduced because not only is an AEF deployed forward, but with the new operational concept, combat sorties launch within just 48 hours. The commander can act quickly. This initiative allows greater concentration of force against an enemy vulnerability.²⁸ With this quick-start capability, the commander manipulates time by using the AEF so the enemy has less chance to prepare or act. Also the commander can exploit unforeseen opportunities on rather short notice. Against an unprepared adversary, the commander can seize ground (space) and reduce the enemy area of operation and freedom of maneuver.²⁹ This facilitates dominant maneuver and the friendly forces' movement into the position of advantage.

Lastly, commanders must consider the factor of **forces** when applying operational art and these Joint Vision 2010 concepts. True operational art involves more than just counting troops and naval or air forces and determining ratios. Commanders must select and employ those forces effectively and in concert with considerations of space and time. The AEF supports effective and decisive employment by providing multi-role capability, day or night. AEFs generate flexible options for air to ground, air to air, and suppression

of enemy defenses (SEAD) operations. It gives the commander the latitude to design his own force package, while still making the combat power available quickly. If mission requirements change, the AEF can adapt.

AEFs are also a force option that can decrease risk, a planning factor that all commanders must consider.³⁰ With its minimal logistics support requirements, the force's footprint is smaller, thus reducing risk--a goal of focused logistics. Also during the decision making process on courses of action, planners and commanders may find risk associated with some options because of a lack of force capability or numbers. The AEF may be the answer to minimizing a vulnerability or reducing a disadvantage.

As stated previously, balancing the factors space, time, and forces will facilitate implementation of Joint Vision 2010. Through this, commanders can achieve **massed effects**--the desired end result of the operational concepts. They may use AEF manipulation of space and time to concentrate combat power at the right time and place; that is effective employment of that force resulting in mass. While the AEF supports the principle of mass, it may be not through the simple calculation of force-ratios and numbers crunching perspective we are accustomed to. Support may come from its direct tie to precision engagement. The AEF weapons systems' precision guided munitions (PGM) capability allows concentration of force at decisive times and points. "PGM provide density, mass per unit volume, which is a more efficient measurement of force."³¹ So while the AEF does not always support mass from the aspect of increased numerical superiority, the superior combat power is there for the commander to concentrate at the decisive time and place to achieve decisive results.

To achieve the aforementioned massed effects, Joint Vision 2010 highlights **coalition partners** as one of the elements supporting these emerging operational concepts.³² As a recognized norm in how we employ forces in today's environment, the vision states, "We must find the most effective methods for integrating and improving interoperability with allied and coalition partners."³³ While perhaps not designed with this intention, the AEF has become one such method.³⁴ By virtue of its pre-hostilities' agreements and training, the AEF helps commanders with some of the challenges in leading these combined fighting teams.

"The psychological and sociological problems generated by differences among coalition partners in culture, customs, religion, and standards of living require a unique mental approach to planning military operations."³⁵ The AEF concept increases exposure and understanding between the U.S. forces and potential coalition partners prior to actual hostilities and therefore reduces the impact of such differences. Through AEF deployments and exercises, commanders can develop plans that manage any difficulties that cannot be removed or resolved prior to their affecting actual operations.³⁶

The AEF concept definitely enhances interoperability.³⁷ During peacetime operations, commanders can learn coalition partners' capabilities and doctrine and then harmonize those attributes with U.S. perspectives. For example, communications networks are addressed during training and non-combat operations which improves that system for use in actual hostilities. The aspect of communications includes not only "hardware" of communications systems and their connectivity, but the intangible system of cooperation and rapport established through increased familiarity and understanding as commanders establish working relationships. Aspects such as these reduce leadership

challenges for operational commanders as well as enhance readiness and effectiveness of these combined operations.

“Train like you’ll fight” is a well-known philosophy and is obviously one part of the benefits of AEF coalition deployments and exercises. Effective coordination and increased familiarity make for an “elite capability” enhancing operational effectiveness in crisis response.³⁸ Through AEF deployments, commanders can learn partners’ unique capabilities in advance and create plans and organizations to capitalize on them and maximize combat potential.³⁹ Such pre-arranged plans support the national prestige of partners. Relationships, as well as combat power, are enhanced when U.S. forces can fight effectively side by side with coalition partners. An important aspect, of course, is that this is accomplished in advance and not during the hectic environment of buildup during a crisis.

The combined aspects of the AEFs deployment concept also produce other benefits.⁴⁰ For example, any increased knowledge or capability our friends and allies glean from these training scenarios strengthens their local defense capabilities. The AEF itself along with this increased partner strength add to deterrence. Perhaps the likelihood that U.S. forces will be needed in an actual contingency operation is decreased.

Challenges

There is much discussion about this new concept. Some argue that the AEF is, in fact, not a new concept. It resembles Checkered Flag and the composite wing. Others contend the label of expeditionary is inaccurate or too broad. Still others focus on its inability to really replace carrier airpower.⁴¹ Since this is an evolving idea, the discussion is beneficial and should be welcomed. However, none of this should take away from the

AEF's added value to decision makers. "Attaining the full potential of aerospace power requires a continuous search for better ways to organize the Air Force."⁴² The composite wing was tested ad hoc in Desert Shield/Desert Storm and formalized shortly afterwards. As such, it is a 7-year old organization. The environment changed, and the Air Force continued the search for better ways that has now led to the AEF. This idea brings new efficiencies and capabilities to operational commanders. Most notable is the aspect that AEFs deploy and fly combat missions in less than half the time of a composite wing.⁴³ And certainly, prearranged bases and the size and number of similar type aircraft reduce the logistics challenge as compared to the composite wing.

Logistics are still an issue for the AEF especially in these early stages of its evolutionary growth. Right now, support equipment is the rough equivalent of 10-12 C-5 loads. However, the Air Force has tasked its new AEF battle lab to reduce that number significantly. The goal is six loads.⁴⁴ Supported by the Air Force focus on lean logistics and programs such as total asset visibility, the lab should meet their goal. Prepositioning is also a partial answer, but sustainment of operations will require more. To overcome this challenge, planners will have to develop follow-on airlift requirements and other options such as in-theater transfer of supplies. This is not insurmountable; just another example where nothing worthwhile comes without some cost. The problem is being addressed.

A far bigger constraint is basing requirements. The AEF needs access to its host country and/or clearances through airspace on its deployment route. It relies on host nation infrastructure and support.⁴⁵ An AEF cannot operate from a bare base. More importantly, the host nation may put restraints on our operations as part of the basing

agreement.⁴⁶ However, the AEF preparations and agreements can address these concerns. Diplomatic efforts may be used to ensure any tradeoffs or constraints by host nations do not jeopardize mission accomplishment. In fact, CENTCOM is aggressively pursuing this issue.⁴⁷ Formal procedures for AEF planning and execution between the State Department and Department of Defense are being drafted. The bottom line is the U. S. has never been denied military success because of runway or airspace unavailability.⁴⁸ With this effort to institutionalize relationships and procedures with the State Department and host nations, there is no reason to believe this will be a show stopper in the future.

Conclusion

Together with other forces, the AEF provides capabilities across the full range of military operations. AEFs can participate in peacetime engagement, deterrence and conflict prevention, and can fight and win—the aspects of full spectrum dominance described in Joint Vision 2010.⁴⁹ An AEF is ready to fight, represents the U.S. effectively, and has flexibility. It is the right tool for the right time.

While AEF deployments now focus on Southwest Asia, the concept warrants consideration in other areas of U. S. interest. Logical next steps seem to be the Pacific and Europe, but other periphery areas should be explored too. The U.S. is a global power and our strategy of engagement and enlargement applies to each of the world's regions.⁵⁰ AEFs allow for expanded presence at minimal cost. The AEF is a new concept which for the Air Force may make “the final transition from a force founded on a strategy of forward-based presence to one built on the vision of global engagement.”⁵¹

Because the AEF facilitates manipulation of space, time, and forces, its value may be on the rise. Future contingencies most likely will not provide the luxury of extensive

buildup time like Desert Storm. AEFs may be needed as the lead elements of a major deployment to counter an enemy's advantage of time, distance, and numbers.⁵² Also in today's environment more than ever, commanders will be involved in coalition operations with both challenges and opportunities for their operational leadership. Because it helps overcome challenges, the AEF can allow commanders to focus on those opportunities.

An evolving concept, the AEF is not without problems. It is not meant to be a silver bullet or panacea, but is often misinterpreted as such. CENTCOM and the Air Force are addressing issues such as logistics and host nation support. These challenges will not impact the AEF's overall effectiveness.

Overall, decisions on when and how to use force are based on assessments of the national interests at stake. Limited resources require careful selection of the means and levels of our participation in particular military operations.⁵³ The AEF adds options not available before and innately sets the stage to "as much as possible... seek the help of our allies and friends" in these endeavors.⁵⁴ So far, each deployment has been a success and has shown increased capability. Challenges are being met and overcome; the reward outweighs the cost in establishing the AEF deployment capability. The AEF has delivered rapid, responsive, and reliable airpower to the CINC. What you need, when you need it--the AEF is a valuable tool for the operational commander.

¹ *National Military Strategy of The United States of America, A Strategy of Flexible and Selective Engagement*; Chairman, Joint Chiefs of Staff, February 1995, no p

² *A National Security Strategy of Engagement and Enlargement*; The White House, February 1996, p. 45

³ *Ibid.*, p. i

⁴ *Ibid.*, pp. 12-13

⁵ John Christenson, CDR, USN; "Nothing Can Match Carrier Presence," *Defense News*, 26 Feb 96, pp. 19-20, (as well as other official Air Force sources) describes this Oct 95 deployment as the first use of an AEF. According to Air Force News Service, USCENTCOM Current News/Home Page, "Jumper talks about AEF concept" by TSgt Eric Robinson (<http://ccfs.centcom.mil/speech.html>), the idea was originally initiated in October 1994 at the end of Operation Vigilant Warrior.

⁶ William R. Looney, III, Brig Gen USAF; "The Air Expeditionary Force, Taking the Air Force into the Twenty-first Century", Winter 96 (<http://www.cdsar.af.mil/apj/win96/looney.html>), p. 1

⁷ USCENAF Briefing Slides, "Airpower Expeditionary Force," March 1996, Slide 3

⁸ Telephone conversation with Lt Col Chris Daehnick, AF/XOG, 6 May 97. As the concept evolves there is discussion about the original design and the best way to present this force option to the CINC. It can be said that any time an aircraft is deployed it is "expeditionary." But the AEF intent is give the CINC a specific capability to meet mission requirements and to do it rapidly.

⁹ Looney, p. 1

¹⁰ USCENTAF Briefing Slide 9. However, Looney cites 40-60 sorties in his overview of the AEF concept.

¹¹ Looney, p. 1

¹² Telephone conversation with Col Bill Hoge, CENTAF A3/A5, 6 May 97. The short notice concept has been simulated and practiced, but without an actual crisis, the requirement for diplomatic clearance slows the procedures. Deployments so far have been planned and based on known times, so there was no need/value to accelerating the process.

¹³ Looney, p. 3

¹⁴ Telephone conversation with Lt Col Daehnick, AF/XOG

¹⁵ Air Combat Command Briefing Slides, "Air Expeditionary Force," undated, Slide 9

¹⁶ Telephone conversation with Lt Col Daehnick, AF/XOG

¹⁷ Ibid.

¹⁸ *National Security Strategy*, p 14

¹⁹ Ibid., p. 14

²⁰ Ibid., p. 14

²¹ Ibid., p. 14

²² *National Military Strategy*, no p.

²³ *Joint Vision 2010*; Chairman, Joint Chiefs of Staff, p. 4

²⁴ Ibid. p. 31

²⁵ Milan Vego; *Operational Factors*, US Naval War College Operations Department Reading, Sept 1996, p. 1 introduces these factors of operational art and explains their value in allowing commanders to achieve freedom of action. A brief explanation of the factors is included; for more in-depth information, see his publication(s).

²⁶ Ibid., p. 12. Author refers indirectly to challenges of being in this central position. His focus is on protecting supply lines.

²⁷ *Operations*, FM 100-5, Headquarters Department of the Army, June 1993, p. 2-6, 2-7

²⁸ Ibid., p

²⁹ Vego, p. 26

³⁰ *Doctrine for Joint Operations*; Joint Pub 3-0, 1 February 1995

³¹ Phillip S. Meilinger, Col, USAF; *10 Propositions Regarding Air Power*, School of Advanced Airpower Studies, p. 45

³² *Joint Vision 2010*, p 19 shows technological innovations, joint forces, and coalition partners as baseline parts associated with the four operational concepts and leading to massed effects. All are encircled by information superiority.

³³ *Joint Vision 2010*, p 9

³⁴ AEF role in coalition building highlighted by several sources.

³⁵ Terry J. Pudas, CAPT, USN; "Preparing Future Coalition Commanders," *Joint Force Quarterly*, Winter 1993-1994, p. 41

³⁶ As explained by Professor David Chandler, Naval War College (NWC), during various seminar presentations Spring 97 trimester, not all problems may be resolved; some are just "managed."

³⁷ Pudas, p 41, discusses command relationships, interoperability, logistics support, and risk to U.S. forces as key coalition operations planning considerations.

³⁸ Scott J. Norwood, Maj, USAF; *Thunderbolts and Eggshells, Composite Air operations during Desert Storm and Implications for USAF Doctrine and Force Structure*, School of Advanced Airpower Studies Thesis, Air University Maxwell AFB, AL, Sept 94, p 45 discusses perfection and practice or training in a different context, but none-the-less applies to my point here.

³⁹ Pudas, p. 44, generically discusses this aspect of executing coalition warfare

⁴⁰ *National Security Strategy*, p 15, discusses benefits of training programs, combined exercises, military contacts, and shared defense in general

⁴¹ This is a key point. Commanders/planners must understand the capabilities of the AEF and recognize it may not be a one-for-one trade out. As Professor Hugh Lynch, Naval War College, points out (28 Apr 97 discussion), the AEF needs to focus on air to sea and ship protection if it is to substitute for carrier air. However, when used to fill a gap, the "like capability" allows us to uphold a continuous force presence in the AOR. AF training and munitions do support air to sea operations according to Col (sel) Jeffrey Gordon, AF pilot/NWC student (12 May 97 interview).

⁴² *Basic Aerospace Doctrine of the United States Air Force*, AFM 1-1, Vol. I, Department of the Air Force, pp. 17-18

⁴³ John Jumper, Lt Gen, USAF to Julie Bird cited in "Quick-strike forces could reduce gulf deployments," *Air Force Times*, March 97

⁴⁴ Julie Bird, "Quick-strike forces could reduce gulf deployments," *Air Force Times*, March 97

⁴⁵ This includes reliance on their security. As many have noted, placement of AEFs at these bases may include increased risk of terrorism, guerrilla, or insurgency attacks. This is simply another part of the commander's risk analysis. Additional U.S. security teams could deploy as required. According to USCENTCOM May 97 briefing slides, the current deployment includes a "full force protection package."

⁴⁶ Christenson, p. 19-20. Author states that in the Dec 95 AEF deployment, Bahrain limited the number of aircraft and length of deployment as well as the type missions flown.

⁴⁷ US Central Command Briefing Slides, "AEF--Evolution of A Concept," Undated (Current May 97), Slide 21.

⁴⁸ John A. Neubauer, Lt Col, USAF; *Air Expeditionary Forces Providing Operational Alternatives*, Naval War College Paper, Jun 96, p. 12

⁴⁹ *Joint Vision 2010*, pp. 25-26

⁵⁰ *National Security Strategy*, p. 35

⁵¹ Looney, p. 1

⁵² Norwood, p. 45

⁵³ *National Security Strategy*, p. 18

⁵⁴ *Ibid.*, p. 19

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